

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1.(original) A self-lubricating plastics material for sealing elements, comprising a wear-resistant polymer matrix in which are dispersed microcapsules containing a lubricating agent.

2.(original) A material according to claim 1, characterised in that said polymer matrix comprises a polyketone.

3.(original) A material according to claim 2, characterised in that said polyketone is an aromatic polyketone.

4.(original) A material according to claim 3, characterised in that said aromatic polyketone is polyetherether ketone (PEEK).

5.(original) A material according to claim 1, characterised in that said polymer matrix comprises a resin selected from among polybutadiene-styrene (PBS), polytetrafluoroethylene (PTFE) and mixtures thereof.

6.(currently amended) A material according to ~~any one of the preceding claims 1-5~~claim 1, characterised in that said microcapsules comprise a shell of polyoxymethylene urea (PMU).

7.(currently amended) A material according to ~~any one of the preceding claims 1-6~~claim 1, characterised in that said microcapsules have an average diameter of between 5 and 500 μ .

8.(currently amended) A material according to ~~any one of the preceding claims 1-7~~claim 1, characterised in that said microcapsules are dispersed in said polymer matrix in a ratio by weight of between 2 and 30 wt. %.

9.(currently amended) A material according to ~~any one of the preceding claims 1-8~~claim 1, characterised in that said lubricant incorporated in the microcapsules is an oil which is low in acidity.

10.(currently amended) A material according to ~~any one of the preceding claims 1-9~~claim 1, characterised in that said lubricant is a fluid lubricant which has a viscosity within the range between 20 and 250 cSt.

11.(currently amended) A material according to ~~any one of the preceding claims~~
~~1-10~~claim 1, characterised in that said lubricant further comprises an additive or filler to
increase mechanical strength or thermal conductivity.

12.(original) A material according to claim 11, characterised in that said additive
is a microelement selected from the group consisting of zinc, boron and mixtures thereof.

13.(currently amended) Use of a material according to ~~any one of the preceding~~
~~claims 1-12~~claim 1 for reducing friction.

14.(currently amended) Use of a material according to ~~any one of the preceding~~
~~claims 1-12~~claim 1 for reducing wear on adjacent surfaces of elements in motion.

15.(currently amended) Use of a material according to ~~any one of claims 1-~~
~~12~~claim 1 as a self-lubricating material.

16.(currently amended) Use of a material according to according to ~~any one of the~~
~~preceding claims 1-12~~claim 1 as a self-lubricating sealing element with a reduced wear
rate.

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17.(original) Use according to claim 16 in which said sealing element is a sealing ring for a piston in a reciprocating compressor.

18.(currently amended) A method for reducing the friction or wear of adjacent elements in motion, in which one of the adjacent surfaces of said sliding elements comprises a self-lubricating material according to ~~any one of the preceding claims 1-12~~claim 1.

19.(original) A method according to claim 18 in which one element of the sliding pair is based on metal.